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ABSTRACT

A study was conducted to determine how much practice in sentence combining was necessary for black college students to reach a peak in syntactic growth. Thirty-three freshman composition students, the majority of whom had verbal Scholastic Aptitude Test scores ranging from 300 to 350, participated in the study. In addition to the regular requirements for the composition course, the students completed more than 32 sentence combining activities over a one semester period. Seven writing samples, as well as pretest and posttest samples, were collected from the students. These samples were analyzed for number of words, T-units, and clauses. The analyses showed that the students reached a peak in syntactic growth after ten weeks (20 hours) of sentence combining practice. The findings support previous research indicating that students will experience statistically significant syntactic growth in the two most accurate indices of syntactic maturity--T-unit length and clause length--if they spend a substantial amount of time on sentence combining activities. (FL)

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# SENTENCE-COMBINING: MEASURING THE RATE OF SYNTACTIC GROWTH IN FRESHMAN COMPOSITION

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SENTENCE-COMBINING: MEASURING THE RATE OF SYNTACTIC GROWTH IN FRESHMAN COMPOSITION

One of the major developments since the publication of Braddock's (1963) comprehensive survey is the advent of sentence-combining. It is perhaps the most carefully studied and fully documented educational technique in the field of English. It has consistently been shown to be extremely effective with a variety of populations ranging from elementary school grades to college English. However, a review of the literature indicates a lack of studies where the experimental population is predominantly black. Beginning with Janet Ross (1971) and culminating with Donald Daiker, Andrew Kerek and Max Morenberg (1978), a definitive pattern of evidence shows that syntactic fluency is substantially improved on the two most accurate indices of syntactic maturity, T-unit length and clause length, as a result of the students having participated in sentence-combining activities. A broad range of investigators generally conclude that a sentence-combining course is superior to a traditional course in improving students' writing and that the amount of time spent on sentence-combining activities appears to be an important determinant in its effect on students' writing.

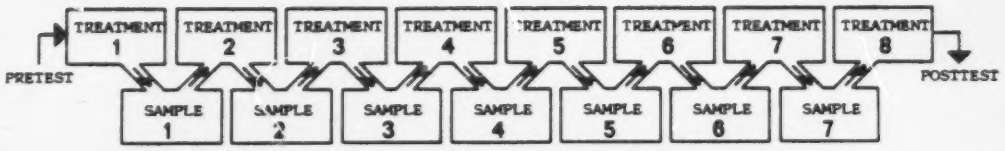
Although sentence-combining has been shown to be an effective technique for enhancing syntactic growth, precisely how much practice is necessary to achieve this growth is still unknown. James Ney apparently underestimated the amount of time needed when his students made no significant gains after being trained in sentence-combining, while John Mellon and Frank O'Hare may have given too much time to sentence-combining.

The classroom teacher needs to know precisely how much practice in sentence-combining is necessary for students to reach their optimal limits. Obviously other factors are related, such as age and intelligence, but the purpose of this study was to determine how much practice in sentence-combining is necessary for college freshmen composition students to reach a peak in syntactic growth.

## Method

### Design

In order to answer the question of how much training in sentence-combining is necessary to produce appreciable gains in syntactic growth, the investigator used a repeated measurement design described by John Roscoe in Fundamental Research Statistics for the Behavioral Sciences (1975), which took the following form.




Samples of writing were taken and analyzed every two weeks. A precise explanation of how this design was implemented is given under "Data Preparation and Analysis."

Subjects

Two freshman English classes of twenty students each were included in the study. Five of the original forty students withdrew from school because of financial difficulties, and two students simply stopped attending class. There were nineteen black males and fourteen black females remaining the full sixteen weeks, all between the ages of seventeen and nineteen years. Most of the students came from homes in small, rural Alabama towns. Ninety-five percent of their parents had never attended college; approximately fifty percent had graduated from high school or had passed the high school equivalency examination.

Total scores on the Scholastic Aptitude Test for these students ranged from 400 to 850. The verbal SAT scores ranged from 200 to 550 with the majority being between 300 and 350. The students' grade level scores on the Nelson-Denny Reading Test, Form B, ranged from 10.3 to 13.6.

Procedures

Students enrolled in Freshman English Composition were selected for this study because of the investigator's involvement in the Freshman Studies Program at Tuskegee Institute. This program emerged as a result of a mandate which was given by the Academy for Educational Development in conjunction with the study and evaluation of the Role and Scope Committee. Because Tuskegee Institute has been known to lose or not graduate more than one-half of its entering class, the program was designed in an effort to do something about keeping more of the freshmen in school and encouraging them to develop at their own rate of learning, thereby stimulating motivation.

It has been found at Tuskegee Institute that many students enter the freshman class as adult beginners in writing, and they tend to drop the English composition course at midterm because they realize they are failing. Since so many researchers had found that sentence-combining practice enhanced syntactic growth and reduced frustration among their populations, the investigator, in her efforts to learn more about methods which help students experience success and become competent writers, selected this technique as appropriate for students enrolled in the Freshman Studies Program. If the present study's experimental group produced significant results, an expansion of its use throughout the Freshman Studies Program could serve to cut down on the attrition rate in the English courses while producing more skilled writers at the same time.

All of the English composition classes at Tuskegee Institute average approximately twenty students per section. Only two students dropped out of the experimental classes for unknown reasons while five students withdrew from school because they were not able to pay their tuition and fees. Data collected from these seven students were deleted from the study; thus, data have been included from thirty-three students.

Since the investigator taught both of the experimental classes, it was impossible to schedule the classes at the same hour. Therefore, the investigator requested that the experimental classes meet during the first two hours of the day.

A table of random numbers was used to randomly assign the classes to the investigator.

Treatments

The initial class meeting was used for introductions and to orientate the population to the overall plan of the course through a discussion of the course outline and course requirements. The course was designed with the major concentration on the expository mode of discourse simply because the Department of English and Communication Arts at Tuskegee Institute designed English 101 as a course in exposition. Although all the writing assignments were expository, the students were introduced to other modes of discourse in the various sentence-combining exercises provided in their textbook, The Writer's Options, and in their supplementary textbook, Sentence-Combining: A Composing Book. There was no formal instruction in any type of grammar in the experimental classes.

In order to avoid the Hawthorne effect, the students were kept totally unaware of the experiment. Because the investigator had used sentence-combining exercises in her classes during the previous semester, the students were not at all suspicious, and they were not made to feel that they were being taught differently.

The regular curriculum required the investigator to concentrate on the following patterns of expository writing: example, classification, comparison and contrast, process analysis, cause and effect, and definition. Description and narration were introduced not as modes of discourse but as expository devices; that is, they were studied as means of explaining a subject. Instead of using a rhetoric or an essay reader along with the selected textbook and the supplementary textbook, the investigator used the sentence-combining activities from these two books to teach the patterns of exposition. Additional models were provided as handouts.

The second class meeting was used as a pretesting period. The students were given the same topic in both classes. They were asked to explain the then controversial topic among most students at Tuskegee Institute, "Interroom-Visitation at Tuskegee Institute." The students were aware of the fact that they were not writing to earn a grade but simply to provide the investigator with a sample of their writing before any instruction occurred.

Following the pretesting period, formal instruction began. The investigator began the course with a discussion of description as a means of explaining. The use of the example was introduced and discussed with description, and its use was interwoven with the other patterns as well. Discussions, explanations, and model displays of the remaining expository patterns occurred in the following order:

Narration as an Expository Technique
Classification and Division
Comparison and Contrast
Process Analysis
Definition
Cause and Effect Relationships

A minimum of two hours each week was devoted to sentence-combining practice, oral and written, using many activities which had been selected to serve as models for the expository patterns being discussed.

The students were actively involved in the writing process each time the classes met. Writing samples to be evaluated were collected every other week, but writing practice occurred at other times during the two-week period. The students were not evaluated on handwriting skills; however, it was emphasized that the papers had to be legible in order to be read. Content, spelling, organization, and mechanics were emphasized

because the investigator had the responsibility of assigning grades since English 101 is a credit course.

More than thirty-two activities using sentence-combining techniques were completed by the students. These sentence-combining activity sheets were kept in looseleaf folders which the students had purchased because they were expected to keep a cumulative file of all writing assignments throughout the semester. Most of these activities were taken from The Writer's Options. Special arrangements were made with the publisher, Harper and Row, through the assistance of one of the authors, Dr. Max Morenberg, to use special pre-publication sections of The Writer's Options, the first college textbook based solely on sentence-combining techniques. Copies of the published textbook were shipped to the investigator's classes within two weeks after the semester began.

The primary focus in this textbook was on helping the students to realize that there are usually several different ways to express the same idea and that these options are "live" options. It is also essential for the students to be able to select the most effective option to serve the specific writing purpose.

The first part of the textbook served only to introduce the students to sentence-combining through the "warm-ups" which were simple and "fun" to transform. These "fun" exercises motivated the students and stimulated their interest in what was to follow.

Then, as the students progressed further, they were provided opportunities to experiment with relative clauses, participles, appositives, and absolutes, and to add modifiers to kernel sentences and free modifiers

to base clauses. There were instances in which they had to find topic sentences within clusters of kernel sentences and rearrange their transforms into paragraphs with detailed supporting sentences. Their themes or essays were developed through the use of expository rhetorical methods.

The textbook is also designed in such a way that the students were able to work independently to a great degree. All of the explanations are very explicit, with the major constructions highlighted in boldface print. The students rarely experienced any difficulties in developing several options when they were working with the sentence-combining exercise. If problems did arise, peer assistance was favored over teacher assistance. Frequently, students worked on problems within groups in the classroom and shared their combinations with the class orally. This brought out participation from students who rarely contributed to classroom discussions.

Very little emphasis was initially put on what was correct and what was incorrect because the investigator did not want to instill a "defeated" attitude in the students; however, because the researcher eventually had to assign each student a grade, their essays were evaluated and were discussed with the students individually. They did not receive any papers back heavily marked with red ink; the investigator discussed each paper with the students in private conferences, pointing out both strengths and weaknesses and providing alternatives. Pre- and postwriting samples were not discussed with the students because of the time factor involved; however, the postwriting sample was collected as the final examination.

The atmosphere in the classroom was relaxed and informal, yet the investigator was sure to see that working and learning were not replaced

by clowning and wasting time. The investigator's role eventually became one of guidance rather than the main focus of all activities; the students became less dependent on decisions from her. Frequently students volunteered to take charge of the lesson and to guide the discussions. They developed positive attitudes toward writing and exhibited greater degrees of confidence when working with sentence-combining exercises. They made their own determinations about what was an acceptable sentence and what was not an acceptable sentence. They discussed and evaluated the different options, and they decided collectively on the acceptability of the options, giving reasons why one was more acceptable than another. The investigator intervened only if the students could not reach a common agreement.

It is important to note that sentence-combining was not used exclusively in these classes but as a supplement to the regular requirements. The students practiced sentence-combining in addition to completing the basic course requirements; however, the basic course requirements were modified to allow time for the sentence-combining exercises to be utilized.

Data Preparation and Analysis

Writing samples which averaged approximately three hundred words each, although some samples contained more than six hundred words, were collected according to an established schedule shown in the design. This schedule involved a pretest and posttest, with samples taken every two weeks. Seven writing samples were collected between the pre- and posttest samples in order to measure the rate of syntactic growth. Since it has been proved through research that writers vary in their performance from

one writing situation to another, the number of writing samples collected was sufficient to counter any differences caused by a writer variable.

Pre- and posttest writing samples and all the other writing samples were totally analyzed. Because of the size of the population, it was not necessary for the investigator to extract segments from each paper for analysis. Each paper was included in the analysis in its entirety although the total number of words varied from student to student.

All the writing samples were collected between January and May; all were written in the classroom while the investigator was present in order to avoid any outside interference. This was the only way that the investigator could be certain that the students had actually done the writing themselves without any assistance from friends or relatives. Examination booklets were used to collect pre- and posttest writing samples, but all other samples were written on looseleaf, lined, standard-sized paper.

It was the investigator's intention to have the students write naturally; no efforts were made to have the students adopt a different writing style. They were encouraged, however, to consider James McCrimmon's stages in the writing process: prewriting, writing, and rewriting. Revision was stressed as an essential part of the writing process.

Each writing sample was analyzed twice by two faculty members who were trained in Kellogg Hunt's procedures for finding and counting the three components which together define syntactic maturity: 1. the word; 2. the T-unit, one main clause expanded at any of many different points by structures which are modifiers, complements or substitutes for words in the main clause; and 3. the clause, a structure with a subject and a finite verb.

Thus, structures which contained one independent clause together with its dependent clausal and non-clausal modifiers were counted as one T-unit. Fragments which occurred because a word had been omitted were counted as T-units; the investigator filled in the missing word. Other isolated groups of words were not counted as Hunt (1965) had done with what he called "garbles." Structures which contained a noun phrase plus a finite verb were counted as clauses. Clauses which had been lengthened by coordinated subjects and coordinated verb phrases were counted as one clause.

In arriving at the number of words, the definite and indefinite articles were counted as words; numbers like 48 or 350 were counted as one word; contractions such as "wouldn't" were counted as two words; compound words when they were written as two words were counted as two words and when they were written as one word were counted as one word, and hyphenated words were counted as two words.

Frequently, the investigator checked the numbers which had been recorded on the essays by recounting the same elements and making comparisons in order to assure accuracy in the data collection.

The mean number of words, the mean number of T-units, and the mean length of clauses were calculated from the raw data collected from the nine writing samples using the following procedure developed by Kellogg Hunt:

1. Mean T-unit Length = $\frac{\text{Words}}{\text{T-Units}}$

2. Mean Clause Length = $\frac{\text{Words}}{\text{Subordinate + Main Clauses}}$

3. Ratio of Clauses to T-Units = $\frac{\text{Subordinate + Main Clauses}}{\text{Main Clauses}}$

Once the means had been calculated, those syntactic data were analyzed using one-way analysis of variance for repeated measures, and the summary table produced a significant value of F on two measures, mean T-unit length and mean clause length. The Tukey Test was then applied to indicate where significant differences existed among the nine sample means. The data were analyzed according to males, females, and total group. The point at which the students reached their peak in growth was clearly visible on the summary trial tables provided by the one-way analysis of variance.

## Results

An analysis of variance including repeated measures revealed that two of the three factors of syntactic maturity, T-unit length and clause length, showed increased growth which was statistically significant at the .05 level or less. The ratio of clauses to T-units was not found to be statistically significant.

A summary of mean T-units and standard deviations for the pretest, the posttest, and all writing samples is given in Table 1 according to sex and total group. The statistical significance of the length of T-units between pretest and posttest was found to be at the .05 level or less. The means reflect a substantial increase between the pretest and the posttest with an overall gain within samples from trial to trial. Slight declines do occur within the samples, but the gains are much greater than the losses.

Table 1

MEAN LENGTH OF T-UNITS AND STANDARD DEVIATIONS

| | Females (N=14) | | Males (N=19) | | Females and Males (N=33) | |
|---|---|---|---|---|---|---|
| | Mean | SD | Mean | SD | Mean | SD |
| Pretest | 16.164 | 4.815 | 15.573 | 3.502 | 15.824 | 4.050 |
| Sample 1 | 18.378 | 4.880 | 15.726 | 3.807 | 16.851 | 4.427 |
| Sample 2 | 19.750 | 4.654 | 17.126 | 5.507 | 18.239 | 5.253 |
| Sample 3 | 19.121 | 3.741 | 18.247 | 4.561 | 18.193 | 4.170 |
| Sample 4 | 18.078 | 4.482 | 18.115 | 4.426 | 18.100 | 4.380 |
| Sample 5 | 22.071 | 5.280 | 21.157 | 4.585 | 21.545 | 4.834 |
| Sample 6 | 19.442 | 4.481 | 20.157 | 5.244 | 19.854 | 4.874 |
| Sample 7 | 20.314 | 4.331 | 18.078 | 4.869 | 19.027 | 5.113 |
| Posttest | 19.492 | 4.435 | 20.131 | 3.645 | 19.860 | 3.946 |
| Group Mean | 19.090 | 4.677 | 18.257 | 4.460 | 18.610 | 3.560 |

Table 2 presents a summary of the mean length of clauses and standard deviations for the pretest, the posttest, and all writing samples. Again, there is a significant increase shown between the pretest and posttest and among the samples; however, like T-unit length, slight declines are reflected among the samples, but the gains are much more significant than the losses. The length of clauses was found to be statistically significant at the .05 level or less.

Table 2

MEAN LENGTH OF CLAUSES AND STANDARD DEVIATIONS

| | Females (N=14) | | Males (N=19) | | Females and Males (N=33) | |
|---|---|---|---|---|---|---|
| | Mean | SD | Mean | SD | Mean | SD |
| Pretest | 8.635 | 1.276 | 9.221 | 1.796 | 8.972 | 1.600 |
| Sample 1 | 10.035 | 1.770 | 9.221 | 1.854 | 9.566 | 1.837 |
| Sample 2 | 11.157 | 3.487 | 10.010 | 2.244 | 10.496 | 2.847 |
| Sample 3 | 10.192 | 1.578 | 10.642 | 2.372 | 10.451 | 2.056 |
| Sample 4 | 9.407 | 2.757 | 10.500 | 2.907 | 10.036 | 2.853 |
| Sample 5 | 12.678 | 3.362 | 11.321 | 2.668 | 11.896 | 3.010 |
| Sample 6 | 8.935 | 1.472 | 9.947 | 1.779 | 9.518 | 1.708 |
| Sample 7 | 10.300 | 1.801 | 10.531 | 3.081 | 10.433 | 2.583 |
| Posttest | 10.471 | 1.914 | 11.452 | 2.223 | 11.036 | 2.124 |
| Group Mean | 10.201 | 2.157 | 10.316 | 2.324 | 10.267 | 2.290 |

The ratio of clauses to T-units was not statistically significant in this investigation; however, growth was evident through observed differences. Table 3 presents the ratio of clauses to T-units summary.

Table 3

RATIO OF CLAUSES TO T-UNITS AND STANDARD DEVIATIONS

| | Females (N=14) | | Males (N=19) | | Females and Males (N=33) | |
|---|---|---|---|---|---|---|
| | Mean | SD | Mean | SD | Mean | SD |
| Pretest | 1.878 | 0.359 | 1.700 | 0.290 | 1.775 | 0.328 |
| Sample 1 | 1.850 | 0.345 | 1.710 | 0.296 | 1.769 | 0.320 |
| Sample 2 | 1.850 | 0.379 | 1.668 | 0.503 | 1.745 | 0.457 |
| Sample 3 | 1.807 | 0.406 | 1.773 | 0.260 | 1.787 | 0.324 |
| Sample 4 | 1.971 | 0.304 | 1.747 | 0.211 | 1.842 | 0.275 |
| Sample 5 | 1.785 | 0.367 | 1.894 | 0.285 | 1.848 | 0.322 |
| Sample 6 | 2.178 | 0.316 | 2.010 | 0.223 | 2.081 | 0.326 |
| Sample 7 | 1.942 | 0.317 | 1.721 | 0.482 | 1.815 | 0.429 |
| Posttest | 1.871 | 0.223 | 1.815 | 0.300 | 1.839 | 0.268 |
| Group Mean | 1.903 | 0.335 | 1.782 | 0.327 | 1.834 | 0.335 |

Summary Table 1 shows that the female students wrote slightly longer T-units than the male students. Summary Tables 2 and 3 show that the females wrote slightly longer clauses and more subordinate clauses than the males, yet the differences in the ratio of clauses to T-units was not statistically significant.

Tables 4, 5 and 6 present a summary of mean change scores obtained by subtracting the pretest from the posttest mean treatment scores. There is a very obvious positive change reflected between pre- and post-treatment means for length of T-units and length of clauses.

Table 4

MEAN PRE-POST CHANGE SCORES ON THE
THREE FACTORS OF SYNTACTIC MATURITY

Females
(N=14)

| Factors | Pre | Post | Change | SD |
|---|---|---|---|---|
| Length of T-Units | 16.164 | 19.492 | 3.328* | 4.625 |
| Length of Clauses | 8.635 | 10.471 | 1.836* | 1.595 |
| Ratio of Clauses to T-Units | 1.878 | 1.871 | -0.007 | 0.291 |

*Significant

Table 5

MEAN PRE-POST CHANGE SCORES ON THE
THREE FACTORS OF SYNTACTIC MATURITY

Males
(N=19)

| Factors | Pre | Post | Change | SD |
|---|---|---|---|---|
| Length of T-Units | 15.573 | 20.131 | 4.558* | 3.573 |
| Length of Clauses | 9.221 | 11.452 | 2.231* | 2.009 |
| Ratio of Clauses to T-Units | 1.700 | 1.815 | 0.115 | 0.295 |

*Significant

Table 6

MEAN PRE-POST CHANGE SCORES ON THE
THREE FACTORS OF SYNTACTIC MATURITY

Females and Males
(N=33)

| Factors | Pre | Post | Change | SD |
|---|---|---|---|---|
| Length of T-Units | 15.824 | 19.860 | 4.036* | 3.998 |
| Length of Clauses | 8.972 | 11.036 | 2.064* | 1.826 |
| Ratio of Clauses to T-Units | 1.775 | 1.839 | 0.064 | 0.298 |

*Significant

The next step in the analysis of these data, in the presence of significant F ratios from the analysis of variance, was to measure the rate at which the statistically significant increases were made and to determine where the differences occurred. The Tukey Test was used to make comparisons among the calculated means to determine where the differences occurred.

Figures 1 and 2 present a visual representation which shows that the experimental population reached a peak in growth in T-unit length and clause length after ten weeks or twenty hours of sentence-combining practice. Figure 3 shows that growth in ratio of clauses to T-units peaked after twelve weeks or twenty-four hours of sentence-combining practice.

Insert Figures 1, 2, and 3 about here.

## Conclusions

1. Since the results of this investigation show a statistically significant difference in gain of syntactic maturity on two factors of syntactic growth, length of T-units and length of clauses, at the .05 level or less, the investigator concluded that this difference was caused by or was functionally related to sentence-combining instruction and practice.

2. Although the syntactic growth in ratio of clauses to T-units was not statistically significant, because of observed differences the investigator concluded that the experimental population experienced some growth in the number of subordinate clauses which was due to their training in sentence-combining activities.

3. Because the first writing sample collected after the pretest reflected some growth in the length of T-units and clauses, a growth which never regressed to the pretest level again during the experimental period, it was concluded that as a result of training and practice in sentence-combining, syntactic growth can be observed after two weeks of treatment. At that point, it either remains constant, declines slightly, or is enhanced as treatment continues.

4. Since the experimental population reached its highest peak in syntactic growth after ten weeks, or twenty hours, of practice in sentence-combining, the investigator concluded that twenty hours of sentence-combining practice were required before the students realized maximum growth in length of T-units and length of clauses.

5. The results of this study support previous research by three college-level researchers, Donald Daiker, Andrew Kerek and Max Morenberg, that in

the two most accurate indices of syntactic maturity--T-unit length and clause length--students trained in sentence-combining will experience statistically significant syntactic growth if a substantial amount of time is spent on sentence-combining activities.

## Implications

The present investigation has shown that writing is a skill which can be taught and can be learned if certain oral and written experiences are provided. It has also shown that teaching students how to write and students learning how to write do not have to be thought of as a painful chore, but rather as a stimulating and a rewarding experience which does not necessarily move at an extremely slow pace. This investigation suggests that it is possible to realize significant syntactic gains at the college freshman level after only ten weeks of training and practice in sentence-combining activities.

Sentence-combining activities are intended to serve a complementary role within an English curriculum; they should not become "the curriculum", but sentence-combining has a place within the curriculum. Since the basic idea behind the sentence-combining technique is to help the writer to realize that many options or choices are available during the composing process, chances are increased that the writer will develop a keen sense of recognition for sentences which are more acceptable for different types of situations encountered in the writing process. The possibility of such an outcome would be a major asset to any English curriculum.

Because of the very positive attitudes toward the writing process developed by this experimental population and because of the change scores

in syntactic growth reflected within this population, sentence-combining activities should certainly be used in the teaching of writing in freshman English classes. Although the findings in this investigation are directly related to college freshmen, there is no reason to believe that sentence-combining activities would not be just as useful in advanced college composition or in other advanced writing courses.

Unlike any other studies with which the investigator is familiar, the findings in this investigation provide a time frame for consideration when incorporating sentence-combining activities into a curriculum. Knowing that this experimental population reached its highest point in syntactic growth after ten weeks of training in sentence-combining activities will serve as a guide for future curriculum planning where sentence-combining will be given a major role.

This investigation does suggest that future research may be devoted to testing different treatment schedules to determine if any particular schedule will prove to be more suitable than another. For example, it would be valuable for teachers to know whether it is better to spread the necessary twenty hours of sentence-combining practice out over a ten-week period or spend one hour each day for a total of twenty days practicing sentence-combining or spend four hours each day for a total of five days practicing sentence-combining. Certainly ten weeks is a much longer period of time to devote to this activity if the same results can be achieved in a much shorter time span.

It might also be worthwhile to determine whether a student's IQ has any significant effect on the amount of time needed to reach a peak in

syntactic growth while practicing sentence-combining. Will students with higher IQ's reach a peak in syntactic growth in a shorter time period than those with lower IQ's? Is IQ a significant factor in the length of time required to reach optimal limits in syntactic growth? There is no doubt that treatment schedules would be affected if future investigations yield positive responses to these questions.

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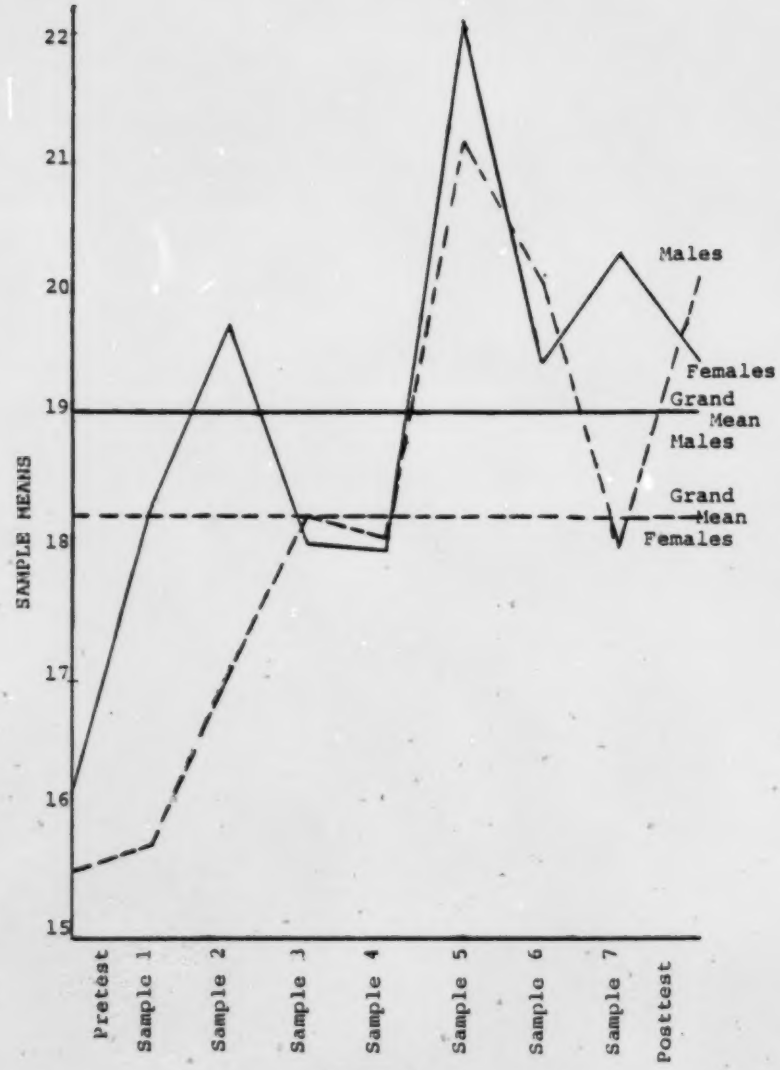


Figure 1

Mean Length of T-Units: Females and Males

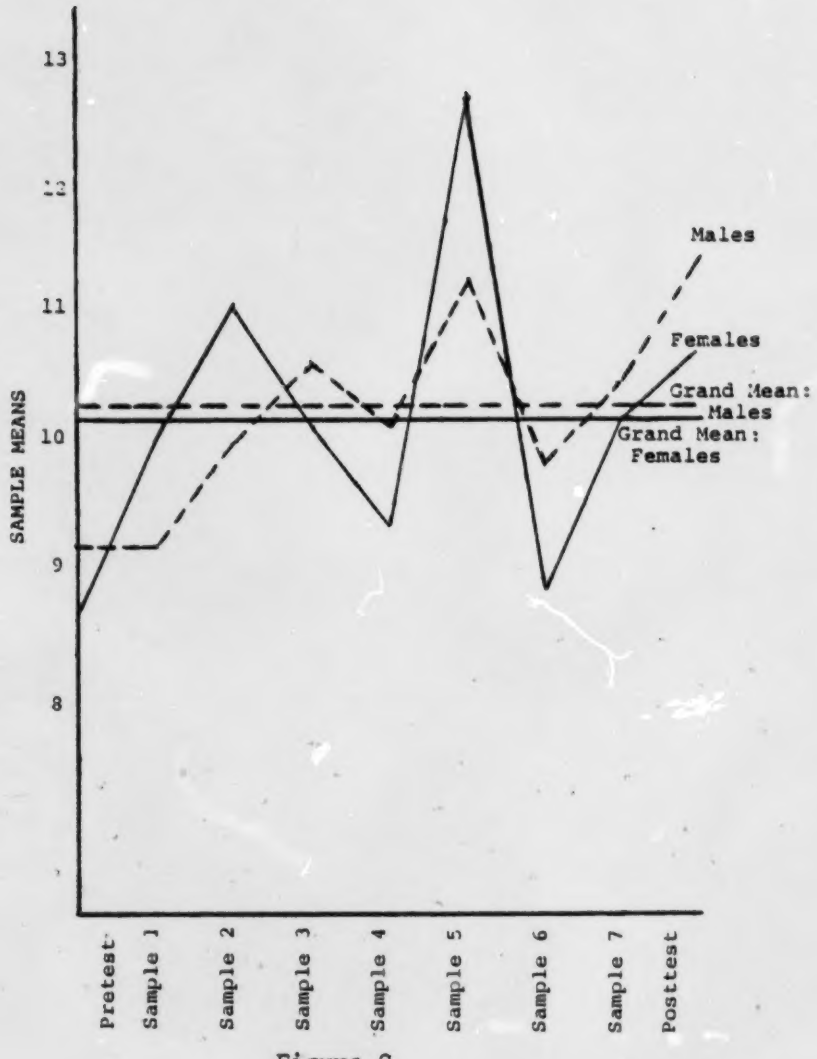


Figure 2

Mean Length of Clauses: Females and Males

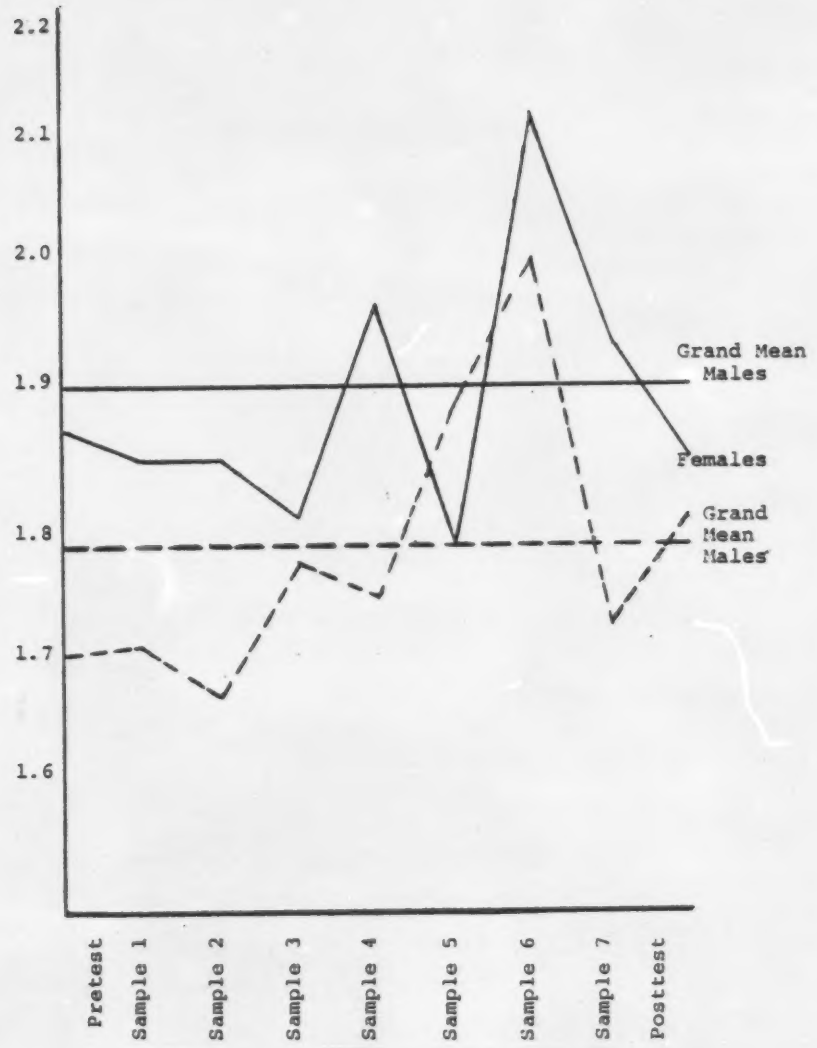


Figure 3

Ratio of Clauses to T-units: Females and Males